wherein said delay interval is established by a value at said periodic reference instant, that is incremented by a value related to a packet count at the first station and at the second station.

27 3. (NEW) In a wireless communications network, a method in a first station to communicate with a second station that is in a sleep mode, the second station having a unique identification value, comprising the steps of:

B1

establishing a periodic reference instant at the first station and at the remote station;

determining a delay interval following said periodic reference instant at the first station, said delay interval being derived from said unique identification value of said second station; and

1, 126

transmitting a message from the first station to the second station at a second instant following said delay interval, said second station having changed from said sleep mode to a standby mode after said delay interval;

wherein said delay interval is established by a beginning subframe count instant that is incremented by a packet count value at the first station and at the second station.

28 4. (NEW) In a wireless communications network, a method in a first station to communicate with a second station that is in a sleep mode, the second station having a unique identification value, comprising the steps of:

establishing a periodic reference instant at the first station and at the second station;

determining a delay interval following said periodic reference instant at the first station, said delay interval being derived from said unique identification value of said second station;

attempting to initiate a communication from said first station to said second station;

concluding at the first station that the second station is in said sleep mode if said attempting step fails to initiate communications with the second station;

waiting for said delay interval following said periodic reference instant at the first station; and

transmitting a message from the first station to the second station at a second instant following said delay interval, said second station having changed from said sleep mode to a standby mode after said delay interval;

wherein said delay interval is established by a value at said periodic reference instant, that is incremented by a value related to a packet count at the first station and at the second station.

29. (NEW) In a wireless communications network, a method in a first station to communicate with a second station that is in a sleep mode, the second station having a unique identification value, comprising the steps of:

establishing a periodic reference instant at the first station and at the second station;

determining a delay interval following said periodic reference instant at the first station, said delay interval being derived from said unique identification value of said second station;

attempting to initiate a communication from said first station to said second station;

concluding at the first station that the second station is in said sleep mode if said attempting step fails to initiate communications with the second station;

waiting for said delay interval following said periodic reference instant at the first station; and

transmitting a message from the first station to the second station at a second instant following said delay interval, said second station having changed from said sleep mode to a standby mode after said delay interval;

wherein said delay interval is established by a beginning subframe count instant that is incremented by a packet count value at the first station and at the second station.

30. (NEW) A highly bandwidth-efficient communications method in a first station to communicate with a second station that is in a sleep mode, the second station having a unique identification value, comprising the steps of:

establishing a periodic reference instant at the first station and at the second station;

determining a delay interval following said periodic reference instant at the first station, said delay interval being derived from said unique identification value of said second station;

receiving at a first station a spread signal comprising an incoming data traffic signal spread over a plurality of discrete traffic frequencies;

adaptively despreading the signals received at the first station by using despreading weights;

attempting to initiate a communication from said first station to said second station;

concluding at the first station that the second station is in said sleep mode if said attempting step fails to initiate communications with the second station;

waiting for said delay interval following said periodic reference instant at the first station; and

transmitting at the first station to the second station a spread signal comprising an outgoing data traffic signal spread over a plurality of discrete traffic frequencies;

wherein said delay interval is established by a value at said periodic reference instant, that is incremented by a value related to a packet count at the first station and at the second station.

31. (NEW) A highly bandwidth-efficient communications method in a first station to communicate with a second station that is in a sleep mode, the second station having a unique identification value, comprising the steps of:

establishing a periodic reference instant at the first station and at the second station;

determining a delay interval following said periodic reference instant at the first station, said delay interval being derived from said unique identification value of said second station;

receiving at a first station a spread signal comprising an incoming data traffic signal spread over a plurality of discrete traffic frequencies;

adaptively despreading the signals received at the first station by using despreading weights;

attempting to initiate a communication from said first station to said second station;